PATENT COOPERATION TREATY

PCT

TRANSLATION INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P37 12PCT 62			FOR FURTHER ACTIO)N	See Form PCT/IPEA/416				
International application No.			International filing date (da	y/month/year)	Priority date (day/month/year)				
PCT/	/FR2004/00	2954	19.11.2004		20.11.2003				
International Patent Classification (IPC) or national classification and IPC H02J7/00									
Applicant PELLENC (SOCIETE ANONYME)									
1.	1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.								
2.	This REPORT cons	ists of a total of	5 sheets, including this cover sheet.						
3.	This report is also a	ccompanied by A	NNEXES, comprising:						
	a. (sent to	the applicant and	to the International Bureau)	a total of 8	sheets, as follows:				
	sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).								
	sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.								
			Bureau only) a total of (indica	ate type and number	r of electronic carrier(s))				
					, containing a sequence listing and/or tables				
	related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).								
4.	This report contains	indications relati	ng to the following items:						
	Box No. I Basis of the re		report	eport					
	Box No. II	Priority							
	Box No. III	Non-establi	shment of opinion with regar	d to novelty, inventi	ive step and industrial applicability				
	Box No. IV	Lack of unit	ty of invention	of invention					
	Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement								
	Box No. VI Certain documents cited								
	Box No. VII Certain defects in the international application								
	Box No. VIII Certain observations on the international application								
Date of submission of the demand			Date	of completion of thi	is report				
Name and mailing address of the IPEA/EP			Autho	Authorized officer					
Facsimile No.			Telep	hone No.					

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/FR2004/002954

Box	No. I	I Basis of the report							
1.		h regard to the language, this report is based on the internationated under this item.	onal application in the language in	which it was filed, unless otherwise					
		This report is based on translations from the original langu which is the language of a translation furnished for the pur international search (Rule 12.3 and 23.1(b)) publication of the international application (Rule 12.4 international preliminary examination (Rule 55.2 and	poses of:	,					
2.	rece	international preliminary examination (Rule 55.2 and/or 55.3) With regard to the elements of the international application, this report is based on (replacement sheets which have been furnished to the ecceiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to its report): the international application as originally filed/furnished the description:							
		pages 1-17 pages*		as originally filed/furnished					
		pages*		_					
	\boxtimes	the claims:							
				as originally filed/furnished					
		nos.*							
		nos.* 1–41		20.09.2005 with letter					
		nos.*							
	\square		_ received by this Admoraly on						
		the drawings:							
		sheets		as originally filed/furnished					
			received by this Authority on						
	$\overline{}$	sheets*	received by this Authority on						
	닏	a sequence listing and/or any related table(s) – see Suppler	nental Box Relating to Sequence L	isting.					
3.	Ш	The amendments have resulted in the cancellation of:							
		the description, pages							
		the claims, nos.	the claims, nos.						
		the drawings, sheets/figs							
		the sequence listing (specify):							
		any table(s) related to sequence listing (specify):							
4.		This report has been established as if (some of) the amen they have been considered to go beyond the disclosure as f							
		the description, pages							
		the claims, nos.							
		the drawings, sheets/figs							
		the sequence listing (specify):		_					
		any table(s) related to sequence listing (specify):							
*	If ite	em 4 applies, some or all of those sheets may be marked "sup	perseded."						

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Box		Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement				
1.	Statement					
	Novelty (N)	Claims	1-41	YES		
		Claims		NO		
	Inventive step (IS)	Claims	1-41	YES		
		Claims		NO		
	Industrial applicability	(IA) Claims	1-41	YES		
		Claims		NO		

2. Citations and explanations (Rule 70.7)

Reference is made to the following document:

D1: EP 291131 A (EMERSON ELECTRIC CO.) 12 April 1989 (1989-04-12).

INDEPENDENT CLAIM 1

D1, which is considered to be the closest prior art, describes:

a self-contained portable electric power tool unit such as, for example, a secateur, a saw, a fruit-picking tool, a lawnmower, a scrub slasher, a hedge trimmer, an impact wrench, an electric hammer, including at least three separate functional sub-assemblies, namely a first sub-assembly (4) generating the mechanical action of the tool by means of an electric actuator connected, at least during use of the tool, via a flexible electric cord (5), to a second portable sub-assembly (2) constituting the electrical power source for the unit and essentially including a rechargeable electrochemical battery; a third charging sub-assembly (10) is electrically connected, during charging, via a disconnectable flexible cord (13) to the second sub-assembly (2) and is suitable for performing electrical recharging operations of the

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

electrochemical battery of the second sub-assembly.

The subject matter of claim 1 differs from the unit of D1 in that:

- the electrical power of the actuator of the first sub-assembly can be cut off automatically when the battery reaches a low voltage threshold detrimental to the operation thereof;
- the second sub-assembly is provided, on the one hand, with a lithium-ion or lithium-polymer battery made up cells connected in series, such that each cell consists of one or more elements associated in parallel and, on the other hand, of one or more electric or electronic battery management modules for performing the task of protecting the battery against overcurrent; said module or modules being located close to said battery;
- the third sub-assembly consists at least of one electrical power source of which the voltage and the current are suitable for recharging the lithium-ion or lithium-polymer battery.

The subject matter of claim 1 is therefore novel (PCT Article 33(1) and (2)).

The problem addressed by the invention of claim 1 can be expressed as that of adapting the second and third subassemblies of D1 for operation with lithium-ion or lithium-polymer batteries.

To solve this problem, a person skilled in the art would

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not hesitate to modify the third sub-assembly so that the power source supplies a voltage and a current suitable for recharging a lithium-ion battery.

However, a person skilled in the art would not simultaneously think of providing the second sub-assembly with a device, located close to the battery, for protecting against overcurrent and a device for disconnecting the battery from the charging current when the battery reaches a low voltage threshold detrimental to the operation thereof.

The subject matter of claim 1 can therefore be considered inventive (PCT Article 33(1) and (3)).

Since they are dependent on claim 1, claims 2 to 41 can also be considered inventive.